

**REMARKS**

The Office Action of December 1, 2006, has been received and reviewed.

Claims 21-45, 69-82, and 92-111 are currently pending and under consideration in the above-referenced application, each standing rejected.

Reconsideration of the above-referenced application is respectfully requested.

**Objection under 35 U.S.C. § 132(a)**

The amendments filed on September 15, 2005, and March 15, 2006, and October 30, 2006, have been objected to under 35 U.S.C. § 132(a) for purportedly introducing new matter into the specification of the above-referenced application. Specifically, it has been alleged that the phrase “programmed material consolidation” is new matter.

It is respectfully submitted that introduction of the phrase “programmed material consolidation” into several claims of the above-referenced application does not amount to the introduction of new matter into the above-referenced application. This is because the as-filed specification of the above-referenced application provides clear support for the recitation of “programmed material consolidation” in several as-filed claims of the above-referenced application. *See, e.g.*, claims 21, 35, 69, and 76. *See* M.P.E.P. § 608.04. Therefore, the additional inclusion of “programmed material consolidation” in the claims does not amount to the introduction of new matter into the above-referenced application.

Additionally, the above-referenced application discloses use of a specific type of “stereolithography,” which is known to those of ordinary skill in the pertinent art to be an example of a process in which unconsolidated material is consolidated under control of a program; *i.e.*, by a programmed material consolidation process. *See, e.g.*, paragraph [0050] of the as-filed specification.

The as-filed specification of the above-referenced application further defines the term “stereolithography” to broadly include any of a variety of programmed material consolidation techniques, including processes by which polymers are consolidated and processes in which particles are bonded to each other, including, without limitation, stereolithography (*e.g.*, as effected by the 3D Systems devices), selective laser sintering (SLC), layered object

manufacturing (LOM), and three-dimensional printing. *See, e.g.*, paragraphs [0003] and [0004] of the as-filed specification.

In view of the broad definition of the term “stereolithography” provided in the as-filed specification of the above-referenced application, and due to the Examiner’s continued refusal to accept that the specification of the above-referenced application provides an adequate written description to support use of the phrase “programmed material consolidation,” the phrase “programmed material consolidation” has been replaced with the equivalent phrase “stereolithography.”

Accordingly, it is respectfully requested that the new matter objection under 35 U.S.C. § 132(a) be withdrawn.

**Rejections under 35 U.S.C. § 112, First Paragraph**

Claims 21-27, 29-37, 40-45, 69-74, 76-80, and 92-111 have been rejected under 35 U.S.C. § 112, first paragraph, for reciting subject matter that purportedly lacks an adequate written description in the as-filed specification of the above-referenced application.

Again, for the reasons that have just been presented, it is respectfully submitted that the as-filed specification provides an adequate written description of programmed material consolidation.

In order to further prosecution of the above-referenced application due to the Examiner’s concern over the phrase “programmed material consolidation,” each occurrence of “programmed material consolidation” in the pending claims has been replaced with the equivalent term “stereolithography.”

It is respectfully submitted that each of claims 21-27, 29-37, 40-45, 69-74, 76-80, and 92-111 complies with the written description requirement of the first paragraph of 35 U.S.C. § 112 and, therefore, requested that the 35 U.S.C. § 112, first paragraph rejections of each of these claims be withdrawn.

**Rejections under 35 U.S.C. § 112, Second Paragraph**

Claims 26, 27, 37, 73, and 74 stand rejected under 35 U.S.C. § 112, second paragraph, for being drawn to subject matter that is allegedly indefinite. Specifically, it has been asserted that one of ordinary skill in the art would not understand what is meant by the term “substantially,” as used to modify the term “planar” in claims 26, 27, 37, 73, and 74.

It is respectfully submitted that one of ordinary skill in the art would readily understand the scope and meaning of “substantially planar,” when used in conjunction with substrates or surfaces. For example, and not by way of limitation, one of ordinary skill in the art would readily understand that substrates or surfaces that are “substantially planar” may include processing imperfections (*e.g.*, residual features from use of cutting tools, polishing processes, etc., contaminants, surface imperfections, or the like). One of ordinary skill in the art would understand that, while the substrates or surfaces may not be completely planar due to such imperfections, they would still be “substantially planar.” As another nonlimiting example, one of ordinary skill in the art would understand that even though slight curvatures may be present in a surface or substrate (*e.g.*, from warpage, etc.), the substrate may still be “substantially planar.”

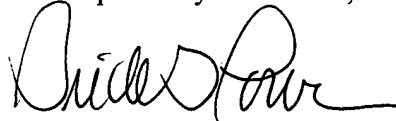
Accordingly, it is respectfully submitted that one of ordinary skill in the art would readily appreciate the scope and meaning of “substantially planar,” as used in claims 26, 27, 37, 73, and 74. As such, it is respectfully submitted that each of these claims complies with the definiteness requirement of the second paragraph of 35 U.S.C. § 112.

Withdrawal of the 35 U.S.C. § 112, second paragraph, rejection of claims 26, 27, 37, 73, and 74 is respectfully solicited, as is the allowance of each of these claims.

**CONCLUSION**

It is respectfully submitted that each of claims 21-45, 69-82, and 92-111 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing allowance of the above-referenced application remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brick G. Power", written in a cursive style.

Brick G. Power  
Registration No. 38,581  
Attorney for Applicants  
TRASKBRITT, PC  
P.O. Box 2550  
Salt Lake City, Utah 84110-2550  
Telephone: 801-532-1922

Date: March 1, 2007  
BGP/sfc:eg  
Document in ProLaw